

Johnson County

Estimated Economic Impact of Agriculture, Food, and Food Processing Sectors 6/26/2017

Using the most recent IMPLAN data available (2015) adjusted for 2017, 42 agriculture, food, and food processing sectors were analyzed to determine their overall contribution to the Johnson County economy.¹

These 42 sectors have a total direct output of approximately \$3.06 billion and support 8,276.70 jobs in Johnson County. Running the model for all 42 sectors simultaneously produces the following results:

Agriculture, Food, and Food Processing Sector Contribution to Overall Johnson County Economy								
Impact Type ²	Employment	% Employment	Total Value Added ³	Gross Regional	Output ⁵	Output % of Gross Regional Product		
				Product ⁴				
Direct Effect	8,276.70	1.86%	\$749,894,899	1.74%	\$3,062,219,811	7.09%		
Indirect Effect	3,913.00	0.88%	\$493,094,334	1.14%	\$814,856,775	1.89%		
Induced Effect	3,899.90	0.88%	\$334,197,751	0.77%	\$549,533,538	1.27%		
Total Effect	16,089.60	3.61%	\$1,577,186,984	3.65%	\$4,426,610,124	10.24%		

As shown in the above table, agriculture, food, and food processing sectors support 16,089.6 jobs, or 3.61% of the entire workforce in the county. These sectors provide a total economic contribution of approximately \$4.43 billion, roughly 10.24% of the economy.

Another metric used to calculate the importance of sectors in an economy is their value added as a percentage of GRP. Total value added by the 42 agriculture, food, and food processing sectors is approximately \$1.58 billion, or 3.65% of the GRP. This indicates that personal income, business income, and taxes generated by these sectors account for 3.65% of the total economy.

The following tables document the overall summary numbers of the model, top industries affected by employment and output, and a listing of all industries that were analyzed.

¹ Article on building a contribution analysis in IMPLAN that avoids double counting: http://www.implan.com/index.php?option=com_content&view=article&id=660%3A660&catid=253%3AKB33&Itemid=70

² Direct, indirect, and induced effects sum together to estimate the total economic contribution in the state. **Direct effects** capture the contribution from agricultural and food products. **Indirect effects** capture the economic benefit from farms and agricultural businesses purchasing inputs from supporting industries within the state. **Induced effects** capture the benefits created when employees of farms, agricultural businesses, and the supporting industries spend their wages on goods and services within the state.

³ Value added = labor income + indirect business taxes + other property type income.

⁴ GRP = final demand of households + governments expenditures + capital + exports - imports - institutional sales.

⁵ Output = intermediate inputs + value added.

In the top ten agriculture, food, and food processing sectors by employment, the landscape and horticulture services sector is the top employer with **3,289.4 employees**. This table also shows the amount of jobs that are created by the agriculture industry in Johnson County.

Top Ten Agriculture, Food, and Food Processing Sectors by Employment					
Sector		otal Total Outpu	ut		
Landscape and horticultural services	3,28	89.4 \$251,632,13	3		
Veterinary services	1,14	43.3 \$117,867,78	1		
Wholesale trade	1,05	\$308,271,80	18		
Bread and bakery product, except frozen, manufacturing		0.0 \$79,315,772	2		
Spice and extract manufacturing		2.7 \$236,516,26	4		
Other animal food manufacturing	355	5.8 \$566,530,09	8		
Full-service restaurants	341	1.4 \$16,736,737	7		
Bottled and canned soft drinks & water	330	6.6 \$265,218,30	8		
Real estate	335	5.4 \$75,223,205	5		
Management of companies and enterprises		2.9 \$75,855,049	9		

The other animal food manufacturing sector directly contributes approximately \$566.5 million to the Johnson County economy. The table below also shows the amount of revenue that is generated in other industries by having a strong agriculture industry.

Top Ten Agriculture, Food, and Food Processing Sectors by Output				
Sector	Total Employment	Total Output		
Other animal food manufacturing	355.8	\$566,530,098		
Fats and oils refining and blending	238.8	\$470,832,401		
Soybean and other oilseed processing	66.4	\$348,761,607		
Wholesale trade	1,058.3	\$308,271,808		
Bottled and canned soft drinks & water	336.6	\$265,218,308		
Landscape and horticultural services	3289.4	\$251,632,133		
Spice and extract manufacturing	382.7	\$236,516,264		
All other food manufacturing	310.2	\$126,836,227		
Veterinary services	1,143.3	\$117,867,781		
Dog and cat food manufacturing	61.9	\$99,879,434		

Below is a summary of all agriculture data with employment levels and output level. These values can tell how many jobs are represented by each agriculture, food, and food processing sector and the output they contributed to the Johnson County economy.

All Agriculture, Food, and Food Processing Sectors Total Total					
Sector		Total Output			
Oilseed farming	Employment 7.9	\$5,594,371.32			
Grain farming	13.4	\$3,123,653.41			
Vegetable and melon farming	3.0	\$441,429.91			
Fruit farming	5.9	\$362,147.48			
· · · · · · · · · · · · · · · · · · ·	0.0	\$82.29			
Tree nut farming	51.2	\$4,995,944.50			
Greenhouse, nursery, and floriculture production					
All other crop farming	59.5	\$2,847,316.50			
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and	229.2	\$17,275,184.63			
farming	6.2	Φ1 507 0 C0 0 1			
Dairy cattle and milk production	6.3	\$1,587,868.21			
Poultry and egg production	0.6	\$340,502.20			
Animal production, except cattle and poultry and eggs	206.0	\$17,161,783.22			
Commercial logging	4.7	\$291,780.44			
Dog and cat food manufacturing	61.9	\$99,879,432.68			
Other animal food manufacturing	355.8	\$566,530,090.33			
Flour milling	17.7	\$26,668,035.51			
Malt manufacturing	31.8	\$51,958,305.36			
Soybean and other oilseed processing	66.4	\$348,761,627.20			
Fats and oils refining and blending	238.8	\$470,832,427.98			
Nonchocolate confectionery manufacturing	66.3	\$31,735,822.68			
Chocolate and confectionery manufacturing from cacao beans	5.2	\$4,588,404.66			
Confectionery manufacturing from purchased chocolate	113.5	\$34,502,620.70			
Meat processed from carcasses	5.7	\$3,236,334.80			
Poultry processing	20.3	\$5,961,278.92			
Bread and bakery product, except frozen, manufacturing	650.0	\$79,315,773.01			
Frozen cakes and other pastries manufacturing	27.0	\$4,294,507.03			
Cookie and cracker manufacturing	19.0	\$7,134,092.33			
Dry pasta, mixes, and dough manufacturing	35.7	\$20,219,032.29			
Roasted nuts and peanut butter manufacturing	1.3	\$870,504.08			
Coffee and tea manufacturing	31.4	\$18,413,400.65			
Spice and extract manufacturing	382.7	\$236,516,250.61			
All other food manufacturing	310.2	\$126,836,219.79			
Bottled and canned soft drinks & water	336.6	\$265,218,322.75			
Breweries	16.5	\$11,786,086.08			
Wineries	28.0	\$6,820,359.71			
Distilleries	47.4	\$49,150,852.20			
Paper mills	26.7	\$20,751,485.82			
Nitrogenous fertilizer manufacturing	32.4	\$56,320,919.04			
Lawn and garden equipment manufacturing	3.3	\$1,760,730.74			
Food product machinery manufacturing	17.7	\$5,855,618.48			
All other industrial machinery manufacturing	307.1	\$82,779,335.02			
Veterinary services	1,143.3	\$117,867,774.96			
Landscape and horticultural services	3,289.4	\$117,867,774.96			

All 105 counties in Kansas have an IMPLAN model and an agriculture, food, and food processing contribution summary. These values do not factor in the retail environment of food sales. Food retail is important, but in order to provide the most accurate picture of what production agricultural and processing contributes to Johnson County, the retail sector was omitted.	